# Chesapeake Marshlands Restoration Study

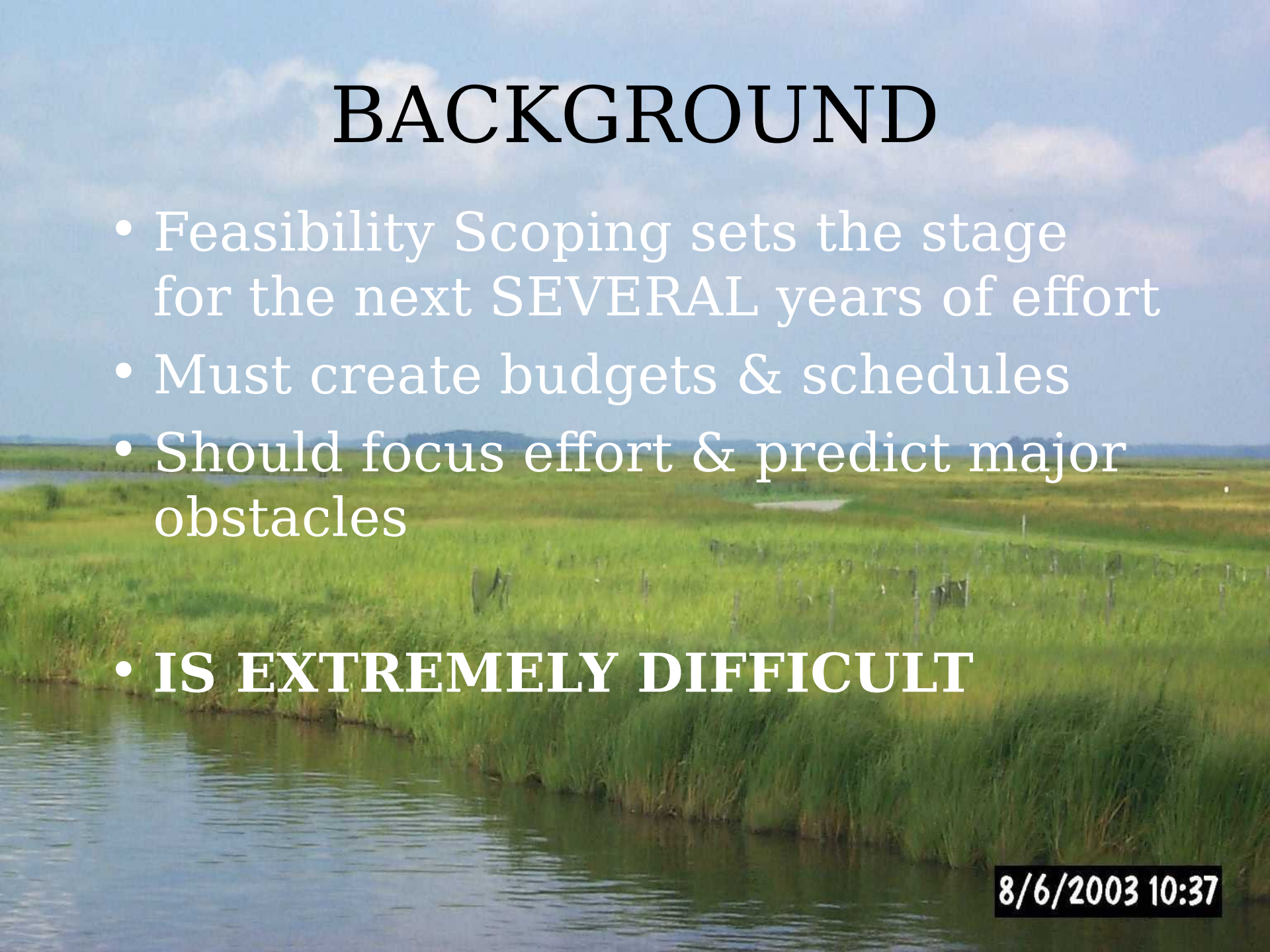
## Collaborative Planning & Science Based Scoping

US Army Corps of Engineers
Baltimore District

# BACKGROUND

- Feasibility Scoping sets the stage for the next SEVERAL years of effort
- Must create budgets & schedules
- Should focus effort & predict major obstacles

- **IS EXTREMELY DIFFICULT**

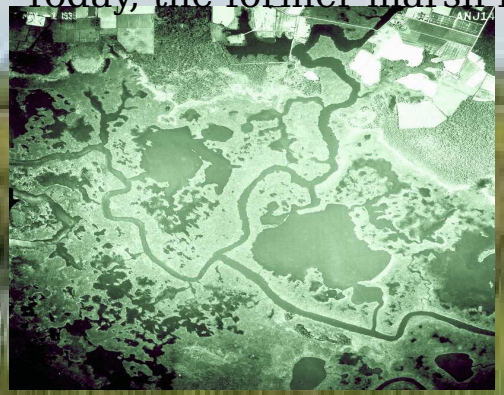


# THE PROBLEM

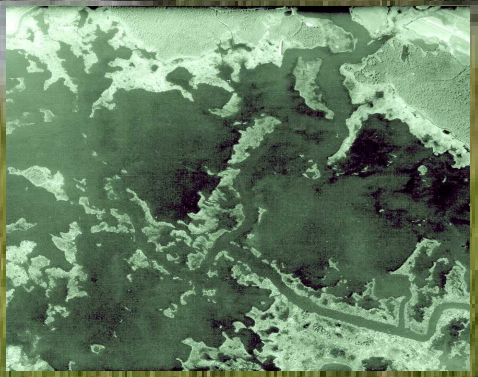
- The Chesapeake Marshlands represent the largest marsh area in the Chesapeake Bay
  - Key stopover in the Atlantic Flyway
  - Key habitat for Striped Bass, Blue Crab, etc..
  - Includes a premier National Wildlife Refuge
- The Marshlands area are HIGHLY threatened
  - 8,000 acres of marsh loss
  - Projected loss of 1000s more acres
  - Blackwater NWR called a ‘refuge in crisis’

# The Disappearing Marsh

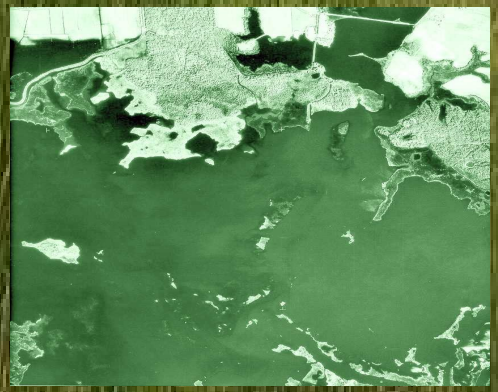
The Confluence of the Blackwater and Little Blackwater Rivers show the steady erosion of the marsh. The marsh breached and eroded from the inside out, slowly connecting the natural ponds into a massive lake. Today, the former marsh is barely recognizable.



1938--with discreet ponds and channels within the marsh system



1974--breached ponds, integrity of the channels have been compromised and significant marsh loss is evident.



1989--discreet features have disappeared and severe

Blackwater totals:
Total Loss: Approximately 8000 acres
Loss Per Year: Approximately 130 acres

# MARSH LOSS IN BLACKWATER WILDLIFE REFUGE

# Restoration Planning

- **Multiple Recommendations for USACE participation**
  - **USACE DMMP**
  - **USFWS Comprehensive Plan Recommends Restoration**
  - **Congressional Support**
  - **Success of demonstration projects**

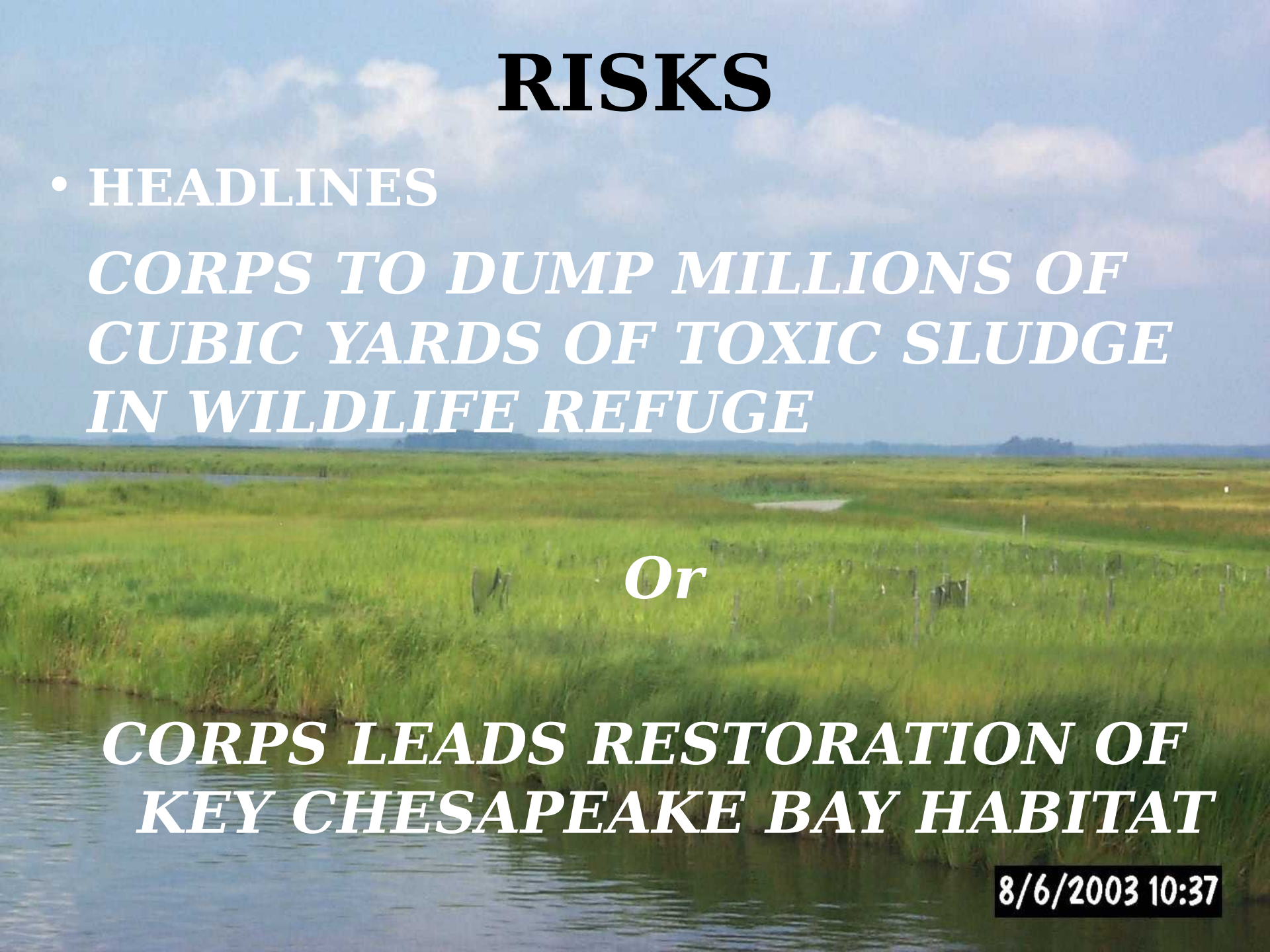
# RISKS

- **HEADLINES**

  ***CORPS TO DUMP MILLIONS OF CUBIC YARDS OF TOXIC SLUDGE IN WILDLIFE REFUGE***

***Or***

***CORPS LEADS RESTORATION OF KEY CHESAPEAKE BAY HABITAT***



# Scoping Challenges

- How do you integrate stakeholders early?
- How do you achieve scientific consensus?
- How do you handle controversy?
- How do you integrate competing needs?
- How do you handle inherent risks?
- How do you handle the many stakeholder groups
  - Dozens of researchers
  - National and local non-profits
  - Federal Agencies
  - State Agencies
  - Leads to 100s of individuals at meetings

# COLLABORATIVE SCOPING

- Address key ecological, engineering & economic issues up front
- Coordination with experts & stakeholders early & often
- Incorporate workshop & conference findings into the feasibility study
  - Allows for better budgeting
  - Allows for better scheduling
  - Will help develop a better project plan
- Builds a larger stakeholder group
  - Scientific Community
  - Non-Profit Organizations
  - State & Federal Agencies

# The Plan

- **Science Based Scoping**
  - Incorporate scientific community into the scoping process
  - Allow the scientific community to identify key priorities & peer review proposals
- **Collaborative Planning**
  - Integrate all stakeholders into the scoping process
  - Allow stakeholder groups to dialogue about issues
  - Allow partners & stakeholders an opportunity to help set goals and objectives
  - Allow partners to integrate concerns into the study scope & budget!

# HOW DO YOU DO THIS?

- Science Based Scoping Process
  - Themes: Ecology, Economics, Engineering
- Develop a two tiered science meeting process
  a. Science Workshop (50 attendees)
     - What do we know?
     - What do we need to know?
     - Conference agenda & needs
  b. Science Conference & Meeting (150 attendees)
     - What are the data gaps?
     - What are the priorities?
     - What are the preferred

# Methods

- Establish a workshop/conference steering committee
  - Cost, sharing partners, scientific community, & paid support
  - Support—UMCES Integration & Application Network —which specializes in applied science problem solving
- Extensive use of break-out sessions
  - Develop Applied Questions & reportable answer sheets
  - Integrate into pre and post conference reports
  - Force groups to identify & prioritize needs
- Develop conference reports as scoping tools

# Key Study Questions

- **Restoration Planning**
  - **How much material is needed?**
  - **Placement sites & thicknesses**
  - **Placement process & timing**
- **Logistics**
  - **How can material be brought to Blackwater or other sites**
  - **Real Estate requirements**
- **Hydrology**
  - **Impacts from Shorter's Wharf Road?**
  - **Water surface elevations**
  - **Sediment budgets**

# Lessons Learned

- Integrate Engineering Team into ecology break-out sections
- The workshop planning effort is not cheap—lots of focused meetings
- Continually re-iterate the APPLIED questions
  - Key data needs, key questions, potential solutions
- Make sure Conference Reports reflect key recommendations
- Use Experts—Conference planning is neither easy nor quick
- Process is not cheap!!!
  - Budget for support, team effort, planning team efforts
  - Budget time & travel for conference, workshop, & post workshop scoping

# SUMMARY

- Positive Traits
  - Develop a process to integrate all stakeholders
  - Allows for peer review & consensus building
  - Provides an avenue for the Corps to listen to stakeholders & still provide leadership
  - Develops a larger, informed, & focused stakeholder group
- Negative Traits
  - Expensive & time consuming (no quick PMP)
  - Corps may not have resources to meet all recommendations
  - Partners may balk at study costs
  - Scientists may NEVER agree